Greetings Wanted to follow up to let you know latest activities and how they may be used as a factor in moving the Hydro business line forward. As you all know, budgeting and allocation for Hydropower are taking two paths these days: (1) President Budget requests with performance measures and (2) direct funding from Power Marketing Authorities/Preferred Customers with their concern for rate impacts. Each of these paths require understanding of our costs and benefits derived. Benchmarking is that guidance to show us where the industry is at, not only in figures but in areas of concern.

I wanted to let you know the latest with EUCG. The small data modeling subcommittee that I am a member of ,as well as overall Corps rep to the EUCG, is finishing our benchtest of the new data categories we have developed the last 6 months. We will be presenting our work to the whole EUCG hydropower committee 10-13 April in Scottsdale for their review and confirmation of direction to update the overall benchmarking program. Dworshak was the project we used for the benchtest. We found that the new data categories focus clearly on industry fundamentals and that the data gathering and manipulation were reasonable within our CEFMS and FEM/Maximo systems that are instrumental and essential in managing our hydropower resources. This has been a significant effort for which we believe we have also had great success. We focus on:

- 2 distinct operations: a) facility operation locally and b) system wide,
- 2 distinct maintenance functions: a) the powerplant and b) the rest of the facility/dam; {this results in comparable activities across peer plants)
- environmental/regulatory/public facilities in 4 areas of fish and wildlife, recreation, cultural/historical resources and other {this cleaned up Ops and Maintenance to distinct activities recognizable to all utilities}
- 2 admin and management, a) local and for us b) district level "generating company" not corporate as in division/hq
- 2 investment levels; large nonrecurring maintenance expense and capitalized items {some utilities capitalize new windings while others don't for example}
- water rental and relicensing that doesn't apply to the Corps
- Once the entire Committee endorses this direction and the web based database is in
  place we will be gathering FY04 data for as many plants as we can to assure this is an
  industry wide representation. I will be working with the new Hydropower lead in HQ once
  selected to assure our membership in EUCG is beneficial to us and the industry. It is the
  goal that any CEFMS queries be shared so we can mimimize burden to any one plant or
  district.
- I will be sharing the new information and it will also be on the EUCG website as this effort goes forward.
- EUCG is a cost effective way to be aware industry wide and is the only organization that is utility member oriented vs consultant. Visit the website and learn more about the benchmarking organization we are now full members of . How this effort will influence our direction in Hydropower is up to all of us.....

Regards Charlie
Charles R. Krahenbuhl, P.E.
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- > ----Original Message----
- > From: Krahenbuhl, Charles R NWW
- > Sent: Tuesday, December 14, 2004 1:13 PM
- > To: Barry Holliday; Bolyvong Tanovan; Brent Mahan; Carl Knaak; Dale Mazar; Dan Butcher; Daniel Murray; David Brown; David Lichy; David Mistakovich; David Shank; Deborah Chenoweth; Des Goyal; Diane Parks; Donald Faulkner; Donald Juett; Donna Ayres; Doug Mcmichael; Elisa Pellicciotto; Hiroshi Eto; James Mahar; James Mueller; Jerry Brown; Jerry Brown; Jody Farhat; John DeVeaux; John Eskridge; Kamau Sadiki; Karl Bryan; Karl Nilson; Kathleen Perales; Kimberley Oldham; Kyle Jones; Larry Holman; Larry Walker; Leon Cromartie Jr; Leonard Henry; Mark Guest; Mark Harvison; Michael Jordan; Michael Roll; Paris Embree; Peter Gibson; Peter Hentschel; Philip Wagner; Rod Shank; Roy Harvison; Sandra Takabayashi; Stephen Voss; Steven Rose; Stuart Cook; Thomas Fleeger; Thomas Verna; Virginia Dickerson; Wayne John; William Holtzman
- > Cc: Mahan, Brent L HQ02
- > Subject: Corps Multipurpose Hydropower Benchmarking-Current Participation

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> Greetings-first a disclaimer-I have your name as part of the overall hydropower team/COP from 06 budget development. If this subject is not in your area of responsibility/influence, please let me know and I'll remove your name from future messages.

>

- > An introduction, I'm Charlie Krahenbuhl and have been the co-chair for the Performance Measures committee in our direct funding partnership with Bonneville Power Administration which includes benchmarking across the hydropower industry for several years. For most of that time our focus was the 21 plants in the Columbia Northwest.
- > There are 2 benchmarking programs in the industry:
- >\* Haddon-Jackson, HJAConsulting, that is an independent consultant who has 10 years of experience worldwide. A fair number of Corps plants have been benchmarked-this year 5 plants in Walla Walla District and several in Nashville were in the program. Walla Walla is having their on-site review with Chuck Haddon on 18 Jan. This benchmarking has had a significant affect on our discussions and direct funding arrangement/budgets with BPA. A couple of years ago we also benchmarked natural resources/recreation with HJA and TVA. Chuck has benchmarked us enough times that he is very conversant in CEFMS and thus data calls have become relatively routine. HJA telephone is 770.993.8778 and email is chaddon@hjaconsulting.com
- >\* The second benchmarking venue is Electric Utility Cost Group (EUCG). This is an industry group originally started by the thermal/nuclears but there is a small but very active hydropower group. A couple of us in the Northwest have been the Corps reps to the group and the Corps became full members last year. We had previously participated/attended as guests of BPA. We are in the process of completely revising and updating the data fields and definitions for this benchmarking and Lower Granite will be our beta test this spring for the new categories. Active utilities have been BC, Manitoba, Ontario and New Brunswick Power, New York Power Authority, BPA, PG&E; all of the BoR plants; Salt River Project; Grant County PUD and several others. By our

membership, approximately \$3500/year, we can benchmark all of our plants and also attend powerplant management workshops where best management practices are shared and issues common to the industry are discussed. In our new data model it is less detailed than HJA but still focuses on core operations and maintenance benchmarks. The website is www.eucg.org

- >\* Please consider how benchmarking may fit into your overall hydropower management program to include performance measures for hydropower businessline budgeting and these two sources. I'm available to discuss at any time . Brent Mahan, currently Hydropower lead in HQ, is the overall proponent-Brent-let's chat on EUCG membership for 05 when you get a chance.....>
- > Regards Charlie
- > Charles R. Krahenbuhl, P.E.
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